

AMENDMENTS TO CLAIMS/LISTING OF CLAIMS

This listing of claims below will replace all prior versions, and listings, of claims in the application.

1. – 20 (Canceled).

21. (New) A patient support comprising:

a mattress having a head section, a foot section spaced from the head section, and a seat section between the head section and the foot section, the seat section being dimensioned to support a seat region of a person,

a force sensor having dimensions less than or equal to the dimensions of the seat section of the mattress and configured to output a signal indicative of force applied to the seat section of the mattress, and

a controller operably coupled to the force sensor to automatically determine the total body weight of a person positioned on the mattress based on the output of the force sensor.

22. (New) The patient support of claim 21, wherein the force sensor comprises an inflatable cell and a pressure sensor configured to measure pressure of fluid in the inflatable cell, and the controller is configured to determine the total body weight of a person positioned on the mattress based on the measured pressure of fluid in the inflatable cell.

23. (New) The patient support of claim 22, comprising at least one baffle in the inflatable cell.

24. (New) The patient support of claim 21, comprising a collector plate positioned between the mattress and the force sensor to direct force applied to the mattress to the force sensor.

25. (New) The patient support of claim 21, wherein the mattress includes a plurality of inflatable bladders and the controller is configured to adjust the pressure of at least one of the mattress bladders based upon the patient's total body weight as determined from the output of the force sensor indicative of force applied to the seat section of the mattress.

26. (New) The patient support of claim 21, comprising a second force sensor sized to fit within the dimensions of the head section of the mattress and configured to output a signal indicative of force applied to the head section of the mattress, wherein the controller is configured to receive the seat section output signal and the head section output signal and determine the total body weight of a patient positioned on the mattress based on the seat section output signal and the head section output signal.

27. (New) The patient support of claim 26, comprising an angle sensor coupled to the head section of the mattress to output a signal indicative of the angle of inclination of the head section relative to the seat section, wherein the controller is configured to determine the total body weight of a patient positioned on the mattress based on the seat section force sensor output signal, the head section force sensor output signal, and the angle sensor output signal.

28. (New) The patient support of claim 21, comprising an angle sensor coupled to the head section of the mattress to output a signal indicative of the angle of inclination of the head section relative to the seat section, wherein the controller is configured to determine the total body weight of a patient positioned on the mattress based on the seat section force sensor output signal and the angle sensor output signal.

29. (New) A patient support comprising:
a mattress having a head section, a foot section spaced from the head section, and a seat section between the head section and the foot section, the seat section being dimensioned to support a seat region of a person, at least the foot section including at least one inflatable bladder,

a force sensor sized to fit within the dimensions of the seat section of the mattress and configured to output a signal indicative of force applied to the seat section of the mattress, and

a controller configured to receive the output signal from the force sensor and automatically adjust pressure in the foot section of the mattress based on the output of the seat section force sensor.

30. (New) The patient support of claim 29, wherein the controller is configured to adjust pressure in a heel pressure relief air bladder of the foot section of the mattress based on the output of the seat section force sensor.

31. (New) The patient support of claim 29, wherein the force sensor comprises a plurality of weight sensors.

32. (New) The patient support of claim 31, wherein the force sensor comprises an upper plate positioned above the weight sensors and a lower plate positioned below the weight sensors.

33. (New) The patient support of claim 32, wherein the force sensor comprises at least one standoff positioned between the upper plate and the lower plate.

34. (New) A computer-implemented method of determining a weight of a patient positioned on a mattress, the method comprising:

executing a monitoring mode wherein a mattress has a status and the mattress status is monitored by a controller to detect a change in the status of the mattress, the status being indicative of a person being positioned on the mattress, a person entering the mattress, a person exiting the mattress or a person changing position on the mattress, and

automatically entering a measuring mode wherein a total body weight of a person on the mattress is determined if the mattress status indicates that a person is on the mattress and not in the process of entering, exiting or changing position relative to the mattress.

35. (New) The method of claim 34, comprising exiting the measuring mode if the mattress status changes.

36. (New) The method of claim 34, wherein the monitoring mode comprises receiving sensor signals from a sensor operably coupled to the mattress, and the measuring mode comprises determining the person's total body weight based on at least one of the sensor signals.

37. (New) The method of claim 34, wherein the sensor is configured to monitor changes in internal pressure in the sensor and the monitoring mode detects a change in mattress status by detecting an internal sensor pressure being higher than a first predetermined level or lower than a second predetermined level.

38. (New) The method of claim 37, wherein the measuring mode comprises measuring a first internal sensor pressure, outputting the first internal sensor pressure to the controller, deflating the sensor if the first internal sensor pressure is greater than a first predetermined pressure limit, inflating the sensor for a predetermined amount of time,

measuring a second internal sensor pressure after the predetermined amount of time, and outputting the second internal sensor pressure to the controller.

39. (New) The method of claim 34, comprising activating a timer after detecting a change in status of the mattress and entering the measuring mode after a time period expires.

40. (New) The method of claim 34, comprising sending a signal indicative of the person's total body weight from the controller to the mattress, selecting at the mattress a pressure setting for at least one inflatable bladder of the mattress based on the person's total body weight, and adjusting the internal pressure of the at least one mattress bladder in accordance with the selected pressure setting.